FEMA

Main Street Drainage Modification
Improving Culverts, Basins and Drains

Grafton County,
New Hampshire

Plymouth, NH - The Town of Plymouth faced with repeated flooding in the downtown area. This was caused by an undersized stormwater collection system. Existing culverts, catch basins and stormwater drains were inadequate to handle even low to moderate runoff. High velocity water moves down the streets causing stormwater backup through the drains and spouts as high as 2 feet. As much as 2 feet of water accumulates during a heavy rainfall, flooding businesses and some homes, and flooding streets and walkways, making the business district inaccessible to traffic.

The mitigation project was planned in two phases to improve serious drainage problems in the downtown business district. The plan was to lay 1,500 feet of 24-inch subsurface drainage pipe along with three drainage manholes and six catch basins. The new drainage system outlet was directed into a stabilized portion of the Pemigewasset River. The system was designed to handle a 25-year flood event. An agreement between the Town and New Hampshire Electric Cooperative allowed the new stormwater system outlet to be constructed on land owned by the utility company. Plymouth State College was also willing to match the Town cost share of the project.

The Plymouth Highway Department had calculated that the annual damage to public access roads and walkways was $50,000 to $100,000 per year over a 10-year period. The Town of Plymouth definitely considers this a success story. With the improvements in place, the severe June 1998 rains did not repeat the flooding of the past, and likely saved the Town thousands of dollars and avoided business disruption. The main road access to the community remained open. Businesses were spared 1 to 2 feet of water by the improved drain system.

Quick Facts

Sector:
Public

Cost:
$50,000.00 (Estimated)

Primary Activity/Project:
Flood Control

Primary Funding:
Local Sources